

## **Research Associate and Electrical Engineer (2 Posts)**

The High Energy Physics Group at Imperial College London invites applications for one Research Associate post and one Electrical Engineer post. The successful applicants will join the team that is currently pursuing an energetic Neutrino Factory accelerator R&D programme.

Recognising the importance of the discovery of neutrino oscillations, the Group has begun to establish a world-leading activity in accelerator-based neutrino physics. The programme includes participation in the proposed T2K super-beam experiment. The need for precision measurements requires the development of novel high-intensity neutrino sources. The group is active in Neutrino Factory R&D and is heavily involved in the study of ionisation cooling and the development of the MICE experiment. The Group has begun to expand its accelerator R&D activity into the development of key accelerator technologies common to super beams, beta beams and the Neutrino Factory, and in particular into the development of suitable front ends for high power proton accelerator drivers. You will work on the development of the proton driver front end test stand to be built at Rutherford Appleton Laboratory in Oxfordshire. The hardware development programme must be developed in the context of an overall conceptual design for the Neutrino Factory. It is therefore expected that you will contribute to the development of aspects of this design. Further information may be obtained from Prof. K. Long (k.long@imperial.ac.uk).

The Imperial College London Group has a strong experimental programme with teams working on BaBar at SLAC, DØ at FNAL, ZEUS at HERA and with the preparations for both the CMS and LHCb experiments at the LHC. There is a strong tradition for analysis and the development of detectors and software. Further details may be found on: [www.imperial.ac.uk/research/hep](http://www.imperial.ac.uk/research/hep).

If you are applying for the Research Associate position you should have (or be about to obtain) a PhD in particle physics. If you are applying for the Electrical Engineer position you should have (or be about to obtain) an appropriate engineering qualification. The positions are available from April 2005 and will be for an initial period of 2 years. You will be expected to spend some time at Rutherford Appleton Laboratory.

Salary for the Research Associate post will be in the range £22,116 – £30,518 per annum and for the Electrical Engineer post in the range £25,259 - £30,518 depending on qualifications and experience.

A job description and an application form can be obtained from the following websites:

- <http://www.ic.ac.uk/employment/research/index.htm> for those interested in the Research Associate post
- <http://www.ic.ac.uk/employment/administrative/index.htm> for those interested in the Electrical Engineering post.

Alternatively, please contact Ms Paula Brown, Tel: +44 (0) 20 7594 7823, Email: [paula.brown@imperial.ac.uk](mailto:paula.brown@imperial.ac.uk). Completed application forms, including a full curriculum vitae and list of publications, should be sent to Ms Paula Brown, Department of Physics, Blackett Laboratory, Exhibition Road, Imperial College London SW7 2AZ.

**Closing date: 14<sup>th</sup> February 2005**

*Valuing diversity and committed to equality of opportunity*